



MATERIAL SAFETY DATA SHEET

Section 1 Company and Product Identification

Product Name	LH Series Cleaner	Doc. ID 721542-75 AB Issued (year/month/day) Revised (year/month/day) 2006/08/18
Part Number	721542, 721543	
Product Use	For In Vitro Diagnostic Use. See product literature for details.	
Manufacturer	Beckman Coulter, Inc. 4300 Harbor Blvd. Fullerton, CA 92835-3100, U.S.A. ECREP Address: Beckman Coulter Ireland, Inc. Mervue Business Park, Mervue, Galway, Ireland 353 91 774068	
Distributor and Emergency Phone No.		Refer to attached list, Document ID: 472050, for local distributor and emergency phone numbers.

Section 2 Composition and Information on Ingredients

Hazardous Ingredients:	None
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Section 3 Hazards Identification

Emergency Overview	Blue; Clear; Liquid; Odorless Nonflammable aqueous solution. Does not meet EU, OSHA or WHMIS criteria for hazardous materials.		
Physical Hazards	No physical hazards were determined from a review of available literature.		
Potential Health Effects Summary	This product does not meet EU, OSHA or WHMIS criteria for hazardous materials.		
Product Hazard Classifications	EU: Not applicable	WHMIS: Exempt	US OSHA: Not applicable
Beckman Coulter Safety Rating	Flammability (Section V): 0 Health (Section XI): 1 Reactivity with Water (Section X): 0 Contact (Section VIII): 1	Code 0=none 1=slight 2=caution 3=severe	

Section 4 First Aid Measures

Inhalation	If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.
Eye Contact	If product enters eyes, wash eyes gently under running water for 15 minutes or longer, making sure that the eyelids are held open. If pain or irritation occur, obtain medical attention.

Section 4 First Aid Measures (Continued)

Skin Contact	In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If pain or irritation occur, obtain medical attention.
Ingestion	If ingested, wash mouth out with water. If irritation or discomfort occurs, seek medical attention.

Section 5 Fire Fighting Measures

Flash Point	Not applicable
Flammable Limits	Not applicable
Autoignition Temp.	Not applicable
Extinguishing Media	Use extinguishing media suitable for surrounding fire.
Special Fire and Explosion Hazards	None identified.
Hazardous Combustion Products	No combustion products posing significant hazards are expected from this product (a dilute aqueous solution).
Protective Equipment for Firefighters	Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.

Section 6 Accidental Release Measures

Personal Precautions	No special precautions are necessary. Use good laboratory procedures.
Spill and Leak Procedures	Absorb spilled material with an appropriate inert, non-flammable absorbent and dispose according to local regulations.
Environmental Precautions	Contain spill to prevent migration.

Section 7 Handling and Storage

Handling Precautions	No special precautions are necessary; use good laboratory procedures.
Recommended Storage Conditions	Keep away from incompatible material (see Section 10). To maintain efficacy, store according to the instructions in the product labeling.

Section 8 Exposure Controls and Personal Protection

Exposure Limits	
US OSHA:	None established
ACGIH:	None established
DFG MAK:	None established
Engineering Controls	No special engineering controls are required. Use with good general ventilation.
Respiratory Protection	Under normal conditions, the use of this product should not require respiratory protection.
Eye Protection	Safety glasses or chemical goggles should be worn to prevent eye contact.

Section 8 Exposure Controls and Personal Protection (Continued)

Skin Protection	Impervious gloves, such as Nitrile or equivalent, should be worn to prevent skin contact.
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Section 9 Physical and Chemical Properties

Physical State	Liquid
Color	Blue
Transparency	Clear
Odor	Odorless
Odor Threshold	Not applicable
pH	≈ 8.5—8.9
Boiling Point	Not available
Melting Point	Not available
Specific Gravity	≈ 1.02 @20°C
Vapor Pressure	Not available
Vapor Density	Not available
Evaporation Rate	Not available
Solubility	
Water	Miscible
Organic	Not available

Section 10 Stability and Reactivity

Stability	Stable under normal temperatures and pressures.
Hazardous Incompatibilities	Strong acids Strong bases Strong oxidizers
Hazardous Decomposition Products	No decomposition products posing significant hazards would be expected from this product (a dilute aqueous solution).
Conditions to Avoid	Keep away from incompatible material.

Section 11 Toxicological Information

Toxicity Data for Hazardous Ingredients	Not applicable
Primary Routes of Exposure	The most likely routes of exposure are skin and eye contact. Inhalation may occur if mists are formed in product use.
Potential Effects of Acute Exposure	None identified.
Potential Effects of Chronic Exposure	None identified.

Section 11 Toxicological Information (Continued)

Symptoms of Overexposure	None identified.
Carcinogenicity	This product does not contain a reportable concentration ($\geq 0.1\%$) of any ingredient listed as carcinogen by ACGIH, IARC, NTP, OSHA or 67/548/EEC Annex I.
Other Effects	None identified.
Conditions Aggravated by Exposure	None identified.

Section 12 Ecological Information

Ecotoxicity	No information available.
Biodegradability	No information available.
Mobility	No information available.

Section 13 Disposal Considerations

Waste Disposal	Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.
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Section 14 Transport Information

Transportation of this product is not regulated under ICAO, IMDG, US DOT, European ADR or Canadian TDG.

Section 15 Regulatory Information

US Federal and State Regulations

SARA 313	Ethylene Oxide is subject to reporting requirements of Section 313, Title III of SARA. 1,4-Dioxane is subject to reporting requirements of Section 313, Title III of SARA. Hydrochloric Acid is subject to reporting requirements of Section 313, Title III of SARA. Ethylene Glycol Monobutyl Ether is subject to reporting requirements of Section 313, Title III of SARA.
CERCLA RG's, 40 CFR 302.4	Ethylene Oxide is listed. 1,4-Dioxane is listed. Hydrochloric Acid is listed.
California Proposition 65	Ethylene Oxide has been identified by the State of California to cause cancer and reproductive harm. The State of California has adopted a regulation which requires a warning be given to individuals who may be exposed to chemicals identified by the State to cause cancer or reproductive harm. Accordingly, Beckman Coulter advises you of the following warning: WARNING: This product contains a chemical known to the State of California to cause cancer and reproductive harm. 1,4-Dioxane has been identified by the State of California to cause cancer. The State of California has adopted a regulation which requires a warning be given to individuals who may be exposed to chemicals identified by the State to cause cancer or reproductive harm. Accordingly, Beckman Coulter advises you of the following warning: WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 15 Regulatory Information (Continued)**US Federal and State Regulations**

Massachusetts MSL	Ethylene Oxide is listed. Ethylene Glycol Monobutyl Ether is listed. 1,4-Dioxane is listed. Hydrochloric Acid is listed. Magnesium Nitrate is listed.
New Jersey Dept. of Health RTK List	Ethylene Oxide is listed. Ethylene Glycol Monobutyl Ether is listed. 1,4-Dioxane is listed. Hydrochloric Acid is listed. Magnesium Nitrate is listed. Magnesium Chloride is listed.
Pennsylvania RTK	Ethylene Oxide is listed. Ethylene Glycol Monobutyl Ether is listed. 1,4-Dioxane is listed. Hydrochloric Acid is listed. Magnesium Nitrate is listed.

EU Labeling Classification

Preparation not classified.

Canada

This product is exempt from WHMIS label and MSDS requirements.

PIN: Not applicable

Ingredients on Ingredient Disclosure List:	Ethylene Oxide Ethylene Glycol Monobutyl Ether 1,4-Dioxane Hydrochloric Acid
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Ingredients with unknown toxicological properties:	Product is exempt
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Section 16 Other Information

For further information, please contact your local Beckman Coulter representative.

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